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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/779,985	02/17/2004	David Huang	EQUUS-106A	8892
7590 11/14/2008				
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EXAMINER				
BROADHEAD, BRIAN J				
ART UNIT		PAPER NUMBER		
3664				
MAIL DATE		DELIVERY MODE		
11/14/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/779,985

**Applicant(s)**

HUANG, DAVID

**Examiner**

BRIAN J. BROADHEAD

**Art Unit**

3664

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 9-3-08.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 24-34 and 36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 24-34 and 36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 24-34, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alfaro et al., 5491418, in view of Mitcham et al, EPA420-R-00-017
3. Alfaro et al. disclose connecting a protocol specific connector to a handheld diagnostic device, identifying physical features of the connector, the physical features directly identifying at least one diagnostic standard associated with the vehicle under test and being unrelated to vehicle information other than the identification of the standard, identifying communications protocols associated with the standard, retrieving configuration data associated with the communication protocol, and configuring the diagnostic device in accordance with the retrieved configuration data on line 58, on column 1, through line 2, on column 2; the step of identifying physical features of the connector includes identifying the connector connectivity configuration and identifying the connector pin configuration on lines 40-50, on column 3, and lines 24-28, on column 3; the step of identifying physical features of the connector comprises performing a continuity test to identify whether continuity exists between specific pins of the connector on lines 55-60, on column 3; determining if the connector is a standard OBD-2 connector on line 2, on column 3, SAE J 1962 is the specification for OBD-2 DLCs;

the method is performed with the device disconnected from the vehicle diagnostic port on lines 55-64, on column 3, here it states the connector provides the configuration information and connection to the vehicle is not required; a CPU 78, memory on lines 31-32, on column 8; a protocol specific connector for connecting the device to the diagnostic port (10); the connector having features recognizable by the CPU as corresponding to at least one associated comm. protocol on lines 1-35, on column 3; a look up table identifying diagnostic configuration data on lines 25-34, on column 8; and the CPU configuring the diagnostic device in accordance with the configuration data on lines 45-67, on column 6.

4. Alfaro et al. do not disclose the at least one communication protocol being identified based upon identification of the two pins connected there between and serially polling the OBD systems using each of the plurality of communication protocols until successful communication is established between the device and the vehicle OBD, or this is accomplished with a sequencer. It would have been obvious to one of ordinary skill in the art at the time the invention was made to multiple circuit elements 22, which would include jumpers, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. Alfaro et al. already discloses examining electrical characteristics between pins to determine the communication protocol. Using multiple circuit elements (22) is just an obvious modification that would allow even more communication protocols to be identified.
5. Alfaro et al. disclose the limitations as set forth above. They do not disclose serially polling the OBD systems using each of the plurality of communication protocols

until successful communication is established between the device and the vehicle OBD, or this is accomplished with a sequencer. Mitcham et al. teaches that the OBD-2 regulations adopted by the federal government require automatic hands-off determination of the communication protocol on page 6. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the teaching of Mitcham et al. in the invention of Alfaro et al. because it would make the device of Alfaro et al. comply with government regulations.

### ***Response to Arguments***

6. Applicant's arguments filed 9-03-08 have been fully considered but they are not persuasive. The device that Alfaro refers to when talking about the device or vehicle specific circuit element could just as easily be used to indicate that the diagnostic device is attached to a certain protocol device. The "device type" disclosed could easily just be an indication of the protocols the vehicle diagnostic system uses. This would be an obvious modification with no unexpected results and would prevent having a different connector for every type of vehicle.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRIAN J. BROADHEAD whose telephone number is (571)272-6957. The examiner can normally be reached on Monday through Thursday or Tuesday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Khoi Tran can be reached on 571-272-6919. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Brian J. Broadhead/

Examiner, Art Unit 3664